INTERNATIONAL SEARCH REPORT

International Application No PCT/IB2004/001617

A. CLASSI	FICATION OF SUBJECT MATTER		
IPC 7	A41D1/00	•	
According to	to International Patent Classification (IPC) or to both national class	effection and IRC	
	S SEARCHED	silication and ir o	
	ocumentation searched (dassification system followed by classifi	cation symbols)	
IPC 7	A41D		
Documenta	ation searched other than minimum documentation to the extent th	at such documents are included in the fields se	earched
Electronic o	data base consulted during the international search (name of data	a base and, where practical, search terms used	,
	ata, EPO-Internal	, , , , , , , , , , , , , , , , , , , ,	
** 1 00	ata, El o Thechhai		
	MENTS CONSIDERED TO BE RELEVANT		· · · · · · · · · · · · · · · · · · ·
Category °	Citation of document, with indication, where appropriate, of the	e relevant passages	Relevant to claim No.
		 	
Х	FR 2 818 476 A (FRANCE TELECOM)		1-12
	21 June 2002 (2002-06-21) page 7, line 25 -page 8, line 1	M. figures	
·	3.4	it, rigures	
Х	US 4 539 700 A (SATO MASANOBU)		1–12
[3 September 1985 (1985-09-03)	:	
	column 2, line 52 - line 66; f	igures	
х	DATABASE WPI		1-12
·	Section Ch, Week 199733		
	Derwent Publications Ltd., Lone	don, GB;	,
	Class F07, AN 1997-363376 XP002296894		
	-& WO 97 24042 A (KONOVALOV SE	RGEI).	
	10 July 1997 (1997-07-10)	,	
	abstract; figures 1-4		
		/	
1		-/	
			1
X Fu	orther documents are listed in the continuation of box C.	χ Patent family members are listed	in annex.
* Special o	categories of cited documents:	"T" later document published after the int	empilonal filing date
"A" docum	ment defining the general state of the art which is not	or priority date and not in conflict with cited to understand the principle or the	n the application but
	sidered to be of particular relevance or document but published on or after the International	invention	. , .
filing	g date ment which may throw doubts on priority claim(s) or	"X" document of particular relevance; the cannot be considered novel or cannot	ot be considered to
whic	th is cited to establish the publication date of another ion or other special reason (as specified)	involve an inventive step when the d "Y" document of particular relevance; the	claimed invention
"O" docur	ment referring to an oral disclosure, use, exhibition or	cannot be considered to involve an li document is combined with one or m	ore other such docu-
'P' docur	er means ment published prior to the international filing date but	ments, such combination being obviding in the art.	ous to a person skilled
later	r than the priority date claimed	"&" document member of the same paten	t family
Dale of the	e actual completion of the international search	Date of mailing of the international se	arch report
	20 September 2004	04/10/2004	
Name and	d mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2	Authorized officer	
	NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,	Thibaut. E	
	Fax (+31-70) 340-3016	i inipaul. E	

INTERNATIONAL SEARCH REPORT

reternational Application No

Category o	unition) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages	Polyment to plains his
aregory v	Guation of document, with mulcation, where appropriate, of the relevant passages	Relevant to claim No.
1	US 6 563 424 B1 (KAARIO JUHA) 13 May 2003 (2003-05-13) column 4, line 3 -column 6, line 14; figures 1-5 column 6, line 51 -column 8, line 65; figure 10	1
4	US 5 555 490 A (CARROLL DAVID W) 10 September 1996 (1996-09-10) the whole document	1
1	US 6 483 469 B2 (BOYLE KEVIN R) 19 November 2002 (2002-11-19) the whole document	

INTERNATIONAL SEARCH REPORT

International Application No PCT/IB2004/001617

Patent document cited in search report	}	Publication date		Patent family member(s)	Publication date
FR 2818476	A	21-06-2002	FR AU WO	2818476 A1 1929802 A 0249465 A1	21-06-2002 01-07-2002 27-06-2002
US 4539700	Α	03-09-1985	JP JP	56082709 U 56082710 U	03-07-1981 03-07-1981
WO 9724042	Α	10-07-1997	WO	9724042 A1	10-07-1997
US 6563424	B1	13-05-2003	NONE		
US 5555490	А	10-09-1996	AU AU BR CA CN EP FI JP NO WO US	687500 B2 1435595 A 9408315 A 2178916 A1 1147870 A 0734551 A1 962466 A 10501903 T 962476 A 9516948 A1 5572401 A	26-02-1998 03-07-1995 05-08-1997 22-06-1995 16-04-1997 02-10-1996 07-08-1996 17-02-1998 13-08-1996 22-06-1995 05-11-1996
US 6483469	B2	13-12-2001	BR CN WO EP JP US	0104456 A 1366722 T 0159877 A1 1177599 A1 2003523120 T 2001050645 A1	08-01-2002 28-08-2002 16-08-2001 06-02-2002 29-07-2003 13-12-2001